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ABSTRACT

As educators across the nation launch into frenzied efforts to "do something" in response to the various recommendations of commissions on educational excellence, many are forgetting that knowledge of how to implement change is available. This paper focuses on three concerns that educators must face when fitting general recommendations to specific school settings. First, the improvement to be sought must be defined. Educators should focus energy and commitment on one or two efforts to maximize impact, selecting those most pertinent to the school, most likely to be supported, and least likely to detract from other efforts already underway. Second, activities in support of the change process must be designed and conducted. Since change is a complex process involving initiation, implementation, and institutionalization of the new program or idea, and requires alterations in the behaviors of individuals and groups as well as in the materials they use, each step must be planned thoroughly. Third, the roles of the many participants in the change process must be specified. These participants include state and local policy makers and administrators, local facilitators, and building administrators. Relevant innovation implementation research is cited throughout the document. (PGD)

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It's All in the Doing: What Recent Research Says About Implementation

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IT'S ALL IN THE DOING: WHAT RECENT RESEARCH SAYS ABOUT IMPLEMENTATION

Susan Loucks-Horsley
Pat L. Cox

Prologue

It was nearly midnight. The superintendent of a large midwestern school district finished the final section of the National Science Board Precollege Commission report and put it on the stack of other commission studies. In the preceding weeks, she had read through at least ten similar documents. The superintendent would have read these eventually anyway, in the course of professional reading, but the telephone in the district office had been ringing off the hook recently: community people, including the local newspaper and television station, were wanting to know what action she was going to take, based on the reports. What was she actually going to do to improve the district's educational services?

The superintendent ruffled through the copious notes she had taken listing the recommendations of the various studies. The "what" of these reports seemed pretty clear -- increase graduation requirements, upgrade curricula, etc. But the "how" was not much addressed. Sitting next to the superintendent's pile of education commission reports was an equally high stack of studies describing recent research on the implementation of school improvement. The superintendent monitored such research, finding it helpful in executing district improvement efforts. She was irritated that the recent commission reports and studies had not really addressed the topic of how to go about translating their recommendations into action using this research.

The superintendent was a savvy educator who had seen several waves of reforms beginning with her experience as a young biology teacher in the 1950s when changes in science and mathematics were being urged. She knew that the reports of study groups, however wide-ranging, constitute only a start. In fact, having been associated with change efforts through her entire career, the superintendent had come to think of commission studies and other attention-focusing devices as forming the tip of an iceberg called school improvement. Most people, policy-makers and practitioners alike, concentrate on the small portion above the surface -- the public, political acts of agenda setting and policy making -- whereas ninety-eight percent of a school improvement effort -- the hard part of effecting real change in classrooms -- lies hidden. Many well-intentioned reforms have run aground because their formulators did not plan the "doing" of change.

The superintendent knew that her task and that of others in her district was to fit the recommendations to the needs of the district, not the other way around, despite pressures to act quickly. Moreover, since the district was already engaged in school improvement activities, she and others had to ensure that

attention was not diverted from these ongoing efforts. She cleared her desk and headed off for a much needed rest before heading into the district office for another week. That night, she dreamed that she was the captain of a freighter steaming across a northern ocean filled with icebergs -- and each one was a recommendation for improving American education.

Implementation Considerations: The "What," "How," and "Who" of School Improvement

While the superintendent's dream (or nightmare?) was, of course, fantasy, the image it presents is nevertheless an accurate one. Each recommendation from the many reports and studies is, in fact, the tip of an iceberg, with implementation considerations looming below the surface. As countless educators across the nation are launching headlong into frenzied efforts to "do something" based on the various commission recommendations, many are forgetting -- if they knew -- that knowledge on how to implement change exists. It is as though they are sailing in the night, without radar, and with no understanding of the peril of moving ice in the open ocean. In earlier eras of reform, there was no body of knowledge regarding the implementation of change: educators were indeed traveling in uncharted waters. Now, however, researchers and practitioners have formulated an understanding of school improvement that, if used, can help prevent another round of Titanic-like disasters.

In this paper, we describe the iceberg that is school improvement, acknowledging the tip, then shifting attention to the considerable part underneath that has to do with the fitting of recommendations to particular settings -- the implementation of actual change. Our discussion is based on recently completed research that examined the processes of school improvement in 146 schools across the country (Crandall and Associates, 1982). The findings from this study corroborate and extend the conclusions of other recent investigations of change in schools.

We focus on three considerations having to do with school improvement:

- defining what is to be done in a particular setting;
- designing and conducting activities to support the change process;
- differentiating the variety of roles individuals can and must play in an improvement effort.

Defining the "What" of School Improvement

The various commission reports are a rich smorgasbord of educational improvement suggestions. Like all smorgasbords, however, the reports make it all too easy to pile up one's plate in the excitement of picking and choosing only to find that 1) many of the individual items are not particularly appropriate;

2) there is too much of one thing and not enough of another; 3) there's too much to eat; and/or 4) being overwhelmed by the sheer magnitude, one has lost appetite altogether.

In the face of all this, it takes considerable will power on the part of educators to remember that it is impossible to do everything or even many things. Research and experience clearly point out that tackling too much often results in no one thing being implemented successfully (Hall, 1978; Smith & Keith, 1971). Implementation of change in organizations requires selecting one or two things at a time on which to focus energy and commitment.

This is especially true if there are already ongoing improvement efforts in the district or school. Given the highly exposed nature of education at all levels, educators are vulnerable to the shifting winds of educational fashion. The individuals who must do the real work of change -- teachers and school-based administrators -- soon learn to pay lip service to fads that come and go in rapid succession. The message here is: rank the recommendations and choose only the top one or two to implement.

But how to rank? This is a question that can be answered only by reference to a particular setting. The choice of a particular school improvement effort must be based on the needs of the particular setting in which it is to be implemented. Because change is a difficult, unsettling experience for all concerned, those planning school improvement efforts must take care to diagnose the situations that most warrent improvement. Just because a commission report or study -- or even several at once -- point to a certain need in "American schools," it doesn't mean that any one particular school has a need in that area. Sometimes, even if a need exists, it is better to work in a related area where there is already interest and enthusiasm; the "unfreezing" of people's behaviors and routines may then contribute to more concentrated focus on the need itself. With regard to the commission recommendations, then, educators in a particular setting must take care to choose for implementation those one or two recommendations that most address their specific needs.

But what do we mean when we talk about an "area of need" or a "school improvement?" To most effectively achieve change, both the area for attack and the new program, practice, arrangement or process that will be used in the attack must have impact on teaching behaviors. Recent research has indicated that change efforts of a general nature don't appear to have much impact on educational organizations (Louis & Rosenblum, 1981). For example, change efforts which focus on planning and problem solving with less concern about what is done as a result, have little influence on the ongoing life of the classroom. Research does suggest that change can occur and "capacity" can be built through concentration on a specific practice that is instructional or curricular (Huberman & Crandall, 1982). If a practice is not chosen that has impact on the classroom in some way, then there can be no change

in ultimate outcomes, increased student achievement, for example. This is why merely lengthening the school day (increasing graduation requirements, etc.) -- as some of the task forces and commissions have suggested -- is not an answer in and of itself. Indeed, most of the commission and study recommendations do not refer to the classroom at all and those that do are of a sufficiently general nature that they cannot be implemented without further delineation. Take, for example, the recommendation that time on task be increased. An educator attempting to implement that suggestion would, we hope, ask the question, "increase time on what task?"

Such a question is a practice-related query, one that begins to get at the nuts-and-bolts of classroom change. Developing or selecting a new practice, course, program or process that will change what goes on in the classroom is an important step -- one that requires careful thought and sufficient resources. Research has indicated that "importing" practices that have been used successfully in other settings is an effective strategy -- as long as they "fit" well with the student population, resources available, and educational philosophy of the adopting school (Crandall & Loucks, 1983; Emrick, Peterson & Agarwala-Rogers, 1977; Louis & Rosenblum, 1981). Also, this strategy is clearly more cost-effective than developing one from "scratch." And if the selection is made from the numerous state and federal pools of validated and promising practices (such as the National Diffusion Network and state diffusion programs), there is a greater likelihood that the hoped-for outcomes will occur and the potential pitfalls will be avoided.

Whether imported or locally developed, it is important that the change to be made be specified and well defined in behavioral terms so that all participants can see what is involved (Loucks & Crandall, 1982). This means specifying not only the ultimate outcomes, but also the interim outcomes -- e.g., the changes that will occur in the teachers' behavior. These we call implementation outcomes. When that is done, those involved can judge progress towards both implementation outcomes and ultimate outcomes. It makes everyone's job more manageable, teachers and administrators alike, because everyone knows what the practice looks like.

With a specific, well defined practice in mind, it is possible to scrutinize current practice in a school or other setting and understand how much change will be required to implement the new one. Different settings and different teachers within them will have to change in varying amounts to implement a particular new practice, depending on how much it differs from their current practice. Recent research has concluded that different implementation strategies are appropriate for individuals who must change a lot to implement a new practice compared to those for whom a new practice represents only a minor change (Bauchner, Eiseman, Cox, & Schmidt, 1982). (More about these strategies later.) Other, non-classroom procedures may also have to change

as a result of the implementation of a new practice, but these shifts will be driven by classroom needs rather than the other way around as is often the case.

While deciding on an area of need to work on, and selecting and specifying the practice to be used to meet that need, are both critically important, the job is by no means complete. The most magnificent program can be wasted if careful consideration is not given to how it is introduced and maintained. The next section discusses the "how" of school improvement.

Consideration Of The Change Process: The "How" of School Improvement

Every recommendation of the various reports and commissions will require changes to be made -- sometimes in materials or curricula, sometimes in strategies and behaviors, sometimes in organizational arrangements and structures, and other times in policies and regulations. Regardless of the type of change to be made, the people and organizations making them will undergo a change process. In the past, particularly in large-scale reform movements, but also in periods of smaller-scale innovation, such changes have been approached as "events." Announcements of new mandates, delivery of new sets of materials, decisions to implement a new program -- often these happenings were seen as the change. And just as often they failed to make any difference in schools.

As a result of these early failures, researchers and practitioners alike know that change is a process rather than an event. It takes time to change behaviors, procedures, attitudes; to reorganize roles and responsibilities; and to create the materials, approaches, and resources. Further, it requires a complex array of activities, interactions and people to succeed in an improvement effort that is more than putting a "new name on an old bottle."

The change process has several phases; some of these get ignored in the fervor of reform. Although every change researcher and theorist has his or her own nomenclature for these phases, a basic set would be: initiation/adoption, implementation, and institutionalization. At each phase, the organizations and individuals involved have different needs and concerns (Hall & Loucks, 1978; Huberman & Miles, 1982). The dominant questions are:

Initiation Phase:	What should we/I do? What will it look like? What will it mean for me/us?
Implementation Phase:	How do we/I do it? Will I/we ever get it to work smoothly?
Institutionalization Phase:	How do I/we insure that it will "stick"?

It makes sense then, and research confirms, that each phase requires different actions, activities, and arrangements (Loucks & Zigarmi, 1981). In planning and then in actually implementing the changes motivated by the commission reports and studies of schools, attention (time, resources, focus) must be given to each stage, or nothing will be different after the furor dies down.

The Initiation Phase. In early research on change and innovation -- and in early efforts to reform education -- a great deal of emphasis was placed on the initiation/adoption phase. Getting the right people involved, having appropriate planning and problem-solving sessions, and selecting the correct solutions were the activities most relied on during this phase. Activity stopped (as did the research focus) when the decision was made to adopt a given program or solution.

Clearly there is much to be done during the Initiation phase. Figure 1 lists many of these activities (as well as those for other phases). As we discussed in the last section, developing a clear image of what will happen is critical -- both in the planning and support of the change, and, most importantly, in the classroom. This image needs to be translated into clear expectations for individual behavior (of teachers and administrators alike), and declared or at minimum verified by someone with authority such as the principal or superintendent.

Many "school improvement" projects today spend most of their time and energy on this initiation phase -- and most of that on developing commitment through lots of group meetings attended by everyone who is to be involved. Current research indicates that this could be a costly mistake (Huberman & Crandall, 1982; Louis & Rosenblum, 1981). While having more than one role group involved in planning and thinking carefully about what to do are both important, it is not necessary to have everyone involved, nor is it smart to sink all the resources and energy into these "front-end" activities. We are appalled at one school improvement program sponsored by a state that takes fully two years before anything new is introduced into the classroom. By the time that happens, teachers and administrators tell us they hardly care (i.e., there is no energy left for the change itself). Further, our research indicates that commitment can and does build rapidly and deeply when a new practice is tried in a classroom and benefits to students are apparent (Huberman & Miles, 1982). Teachers and administrators alike become excited and committed to successful programs that they see helping them do their jobs better. Sitting in meetings trying to activate enthusiasm is much less effective. Actually doing something works.

The Implementation Phase. Implementation research is more recent than that of the earlier Initiation phase. When the Rand Corporation's Federal Change Agent Studies (Berman & McLaughlin, 1975; 1978) reported that certain federally supported demonstration programs were failing to result in long-lasting changes in schools, one major failing they pointed out was the lack of attention and emphasis given to the implementation phase

of the change process. Along with other researchers (Charters & Jones, 1973; Hall & Loucks, 1977), they painted scenario after scenario of innovative ideas being developed and never being implemented -- or being implemented in such a superficial way that no real change occurred. The importance of implementation became the focus of continued research and experiments by practitioners, as training and support systems were developed to prepare and then nurture use of new programs by participants.

As a result, we have learned some very important things about how to make implementation successful. To actually "do" something begins with learning the behaviors and tasks required by the new program or practice. Thus, if one looks again at Figure 1, training heads the list of implementation activities. But note that the list is longer than the often one-shot, hit-and-run workshops that are standard fare for some schools. Teachers and administrators can get energized and even learn some new behaviors during a good training workshop, but when they go back to the reality of their day-to-day, minute-to-minute jobs, they need help and encouragement in trying out the new behaviors and integrating them into their routines.

After this has happened, the outcomes of the practice can and should be evaluated: to what extent are people doing what the practice requires? and what is the effect on the learner? Asking the first question is a prerequisite, and should precede by about a year, any effort to answer the second question. Otherwise, it will not be at all clear what any learner outcomes that are discovered can be attributed to; and measuring those outcomes prematurely will only show the effects of initial, uncoordinated, inefficient use -- most likely a dismal picture.

The Institutionalization Phase. Most school improvement efforts congratulate themselves if they end with a careful evaluation. But, research tells us that they're fooling themselves if they think that even glowing evaluation results will mean the program is there to stay.

More recent research studies have shown a trend in successful implementation by schools who paid attention to implementation (Emrick, Peterson & Agarwala-Rogers, 1977; Loucks & Melle, 1980; Louis & Rosenblum, 1981). But as the mysteries of implementation have became better understood, research discovered perfectly implemented programs that were there one year and gone the next. Consideration of the phenomenon of institutionalization was found to be important, especially if the goal was long-term, lasting improvement. The last few years have shown some preliminary understanding of the concept of institutionalization (Miles, 1983; Yin, 1978).

All the ways to ensure institutionalization have not as yet been discovered, but doing the activities listed in Figure 1 help. Securing institutional support, and designating (but not putting full reliance on) a person to be responsible for the maintenance of the program, are vital to successful continuation. While

others turn their attention back to the list of lower priority items from the commission reports and studies, someone is there "minding the store."

Putting It All Together. Understanding of this multi-phased change process can therefore lend guidance to those seeking to implement the recommendations of the various reports and studies. The activities listed in Figure 1 all need to take place. Research confirms that activities in each of the phases are necessary but not sufficient to successful improvement (Crandall and Associates, 1982). This means that:

- changing graduation requirements to essentially double the amount of science taken by the "average" high school student necessitates more than a change in written policy. It also requires careful development or selection of courses to meet the needs of the kinds of students who had not enrolled previously; training of teachers in new behaviors required by the courses and the new kinds of students; and an ongoing support system to meet teachers' need and resupply their storage closets.

- Increasing the quantity and quality of student "time on task" requires more than an inservice workshop. Other required activities might include: helping teachers assess their use of time before a workshop takes place; the selection of a practice which ensures more instructional time by introducing new management and teaching strategies; coaching in classrooms after workshops; and monitoring use of the practice on an ongoing basis.

- And "school improvement projects" that focus primarily on needs assessment, planning, and problem-solving are far too heavy on the "front-end," ignoring or down-playing much of the "back-end" activity needed to change practice and keep it changed. They need to strongly consider paring down activities in the Initiation phase, and adding many in the other phases.

The fact is that schools desiring to implement an improvement of any significance at all need to budget time and resources for a long haul. Acknowledging the multiple stages and activities involved in change is the only way improvement will occur.

Different Roles and Functions: The "Who" of School Improvement

If there is so much to be done to make improvements in schools, who will do it? The research on school improvement is clear: there are functions for everyone who holds a role in the education enterprise, from teachers to policy-makers. This departs somewhat from the commission and study findings, which seem to fault only teachers and administrators (usually building level) for not doing their jobs well. In school improvement everyone is needed.

We believe that it is more useful to think first of what is to be done, and then of who is the best person to carry it out. In some cases the building principal or central office administrator is in the best position to perform a certain function; in other cases, the best person is dictated by the individual situation.

Figure 1 lists most of the functions or activities that must be carried out in a school improvement effort. Every school district has many people to pick from to take primary responsibility for each function: teachers, building administrators, central office instructional staff (curriculum coordinators, staff developers), central office administrators (superintendent, associate superintendent), external consultants or trainers.

As noted above, school improvement research indicates that there are some functions that had best be carried out by people in particular roles (Cox, 1983; Fullan, 1982). For example, a central office instructional staff member, designated as the facilitator or coordinator of an improvement effort, is often in the best position to create awareness, coordinate planning, allocate resources, arrange training, help teachers plan implementation, problem-solve and trouble-shoot, and plan for continuation of the new program. A person at this level often has the resources, the expertise, and the time to attend to such details.

As noted earlier, the focus on a new curriculum or instructional strategy as a vehicle for improvement can mean importing one that has found success in other settings. Thus, there is clearly a role for an external consultant or trainer, someone who can prepare teachers and administrators to use and support the use of the new practice (Cox & Havelock, 1982; Emrick & Peterson, 1978). Conducting initial and follow-up training, with the assistance of the central office coordinator, the external trainer can make an important contribution to an improvement effort.

While central office instructional staff and external consultants can handle the "content" required by a change effort, administrators at both the building and district levels have responsibility for creating and maintaining direction, impetus, incentives and rewards. Exercising "forceful leadership," they must set clear expectations as to what is to be done by whom with what effect (Huberman & Crandall, 1982). Their attention to the improvement effort must be continuous and obvious -- from involvement with planning and selection of what to implement, through supporting institutionalization.

Note that we have not designated the principal as the key to school improvement, as do many of the new studies. We have seen situations where principals were totally inert while major changes occurred in classrooms, resulting in significantly more learning by students. While research has never reported successful improvement where the principal has opposed a change, principals do not have to be the key players. They have important roles, but

FIGURE 1

Necessary Activities for the
Phases of School Improvement

Initiation Phase

Assessing needs, strengths, and resources
Assessing current practice
Setting clear goals, objectives, and expectations
Selecting or developing a new practice
Creating awareness
Assigning roles and responsibilities
Establishing commitment
Developing game plans
Allocating resources
Providing materials
Arranging training
Making schedule and organizational changes in school
Helping teachers plan implementation

Implementation Phase

Initial training
Problem-solving and trouble-shooting
Providing follow-up training
Monitoring classrooms for use
Evaluating implementation outcomes
Evaluating ultimate outcomes

Institutionalization Phase

Training new or reassigned staff
Conducting follow-up and refresher sessions
Incorporating program into curriculum guidelines
Routinely purchasing new materials and supplies
Establishing a budget line item

others do as well. Careful assignment of responsibility can avoid anyone shouldering all of the load (or, in some cases, all of the blame for a failure).

In terms of roles and responsibilities, it is also interesting to note that nowhere in the school improvement literature is there evidence that participation by the private sector increases the potential for success. While the idea is intriguing, our observations are that such collaboration is very difficult and time-consuming. Working with the private sector may in the long run be an important feature of a strong educational system, but doing so requires considering it as one more instance of a change process. Educators and private sector personnel alike will experience the different stages of the new working relationships, and the kinds of expectations, time-frame and support described throughout this paper will need to be attended to if the process is to accomplish the hoped-for outcomes.

Summary and Implications

If the recommendations of commissions, researchers, and scholars are to truly make a difference in American education, schools must pay attention to the cumulative findings from research on school improvement. Among those things to be considered are:

1. Creating an image of what is to be accomplished that extends to and beyond the classroom, and that meets a clear and acknowledge need.

2. Focusing on a practice that brings changes at the teacher/student interface, that is, a curriculum or instructional strategy.

3. Developing a broad base of involvement and support for the effort from people at all levels of the education system.

4. Designing and conducting the improvement effort with adequate attention and resources for <u>all</u> phases of the process: initiation, implementation, and institutionalization.

What does this mean for individuals at different levels of the education system?

For <u>policy-makers</u> at the local, state, and federal levels, it means holding realistic expectations about what and how much can be done. All would agree that there just isn't enough money to do it all. We would add to that that there isn't enough time or energy to do it all. For everything that needs to be changed -- every improvement that needs to be implemented -- individuals have to go through a change process. No one is excluded; federal and state agency staff, administrators, teachers all are affected. Steps cannot be skipped. Research and experience bear out that attempting too many new efforts at one time can ensure that not even one will succeed.

But this is no reason to decrease the insistance on and pressure for improvement. As we noted above, "forceful leadership" is a success strategy: creating realistic expectations, providing adequate resources and support, and closely monitoring progress sends the clear message that "we've got to improve, and we're going to work on it together." Policy makers at all levels need to keep the mission of improvement clear, with the means to get there supported.

But often the means is the problem, especially with the current economic situation. Policy makers need to consider cost-effective measures to support needed improvements. One such measure is dissemination strategies which identify effective practices and support their use in other settings. Many states have such systems; the National Diffusion Network works this way at the national level. Other cost effective measures are technical assistance systems, administrator academies and teacher institutes (Odden, 1984). Whatever the form of the support system, such a system is absolutely necessary if policy makers are to avoid "lip service compliance" to policy mandates.

District-level administrators can also benefit from consideration of these learnings. They too need to exhibit leadership in setting clear expectations for improvement. But they need to consider the mandatory "support" in more detail. Identifying a "local facilitator" -- a person at the district level to orchestrate the effort -- and giving that person resources and "clout" is an important first step. The areas of top priority should consume primary energy. Establishing what those are -- whether computer literacy, upgraded science curricula or leadership skills for principals -- should be done first. Then, the district administrator has the responsiblity to "run interference" and protect the effort from being led astray or watered down by competing priorities.

But, while not "easy," the first part is the "easiest" for district administrators, who themselves often get distracted after the improvement effort appears underway. The job must continue, however, with regular monitoring and public statements or appearances, all to indicate that the effort is still a priority. While the substantive details may be fully the responsibility of the local facilitator, some of the public relations and commitment-maintenance must be chaired by a person with "clout."

The role of local facilitator, most often a district level curriculum or instructional staff member, was described earlier. This is the person who shoulders the implementation effort, working closely with teachers and building administrators to assure that they have the required knowledge, skills and resources, at every stage of the process. As their needs change, the local facilitator adjusts his or her support strategy, from "what do I need?" and "how do I do it?" information and workshops;

to follow-up "comfort and caring" sessions; to administrative arrangements for ongoing continuation and support (Loucks & Zacchei, 1983). To ensure success in this role, the local facilitator must have the support of district administrators, and a clear understanding with building staff of responsibilities for the different functions needed to carry out the effort.

Building administrators in this scheme are important players, but they do not have to take full responsibility for improvement, as many are pressuring them to do. They must participate in identifying needs and solutions, and in planning for how the required training, support, and rearrangements will integrate into the ongoing life of the school. Like the district administrator, the principal needs to set expectations for what staff will do and will achieve, and then behave in ways to support the words. While he or she need not function as the substantive expert, monitoring progress and calling on the local facilitator with discovered needs or ones expressed by the teachers are both important parts of the role.

Everyone who has a role or an interest in American schools can help them improve. The tip of the iceberg called school improvement has been sighted; the fervor and movement the sighting has caused has done more to motivate change than anything in the last twenty-five years. And, as never before, we have some clear outlines of the iceberg beneath the surface. While all the nooks and crannies are not known, if care is taken to use what we know about the process of school improvement, educators such as our concerned superintendent will be able to avoid reliving the costly disasters of the past.

Epilogue

Early Monday morning, the superintendent attended her first meeting of the day, a breakfast gathering of the principal and several teachers from one school in the district along with the director of curriculum from the central office. These individuals had been meeting regularly for the last few months to discuss the ongoing implementation of an exciting practice focused on developing math skills, especially in the area of problem-solving. The superintendent joined the group occasionally to hear the issues on which they were currently working and to indicate her support for their effort, which had required a lot of time and energy to get underway.

On this particular morning, the conversation centered around the teachers' need for more time in the math segment on some mornings -- the new practice required sustained concentration for a longer period than was currently scheduled. Moreover, several children were called out to band practice two mornings per week right in

the middle of the period, which disrupted the whole class. At this meeting, thanks to considerable prior work with others who would be affected by any changes, the group was able to make the shifts and rearrangements needed to solve the problem. It took careful consideration of the people involved, of the requirements of the program, and of the realities of everyday school life.

The superintendent left the meeting and went into her office, where she found a stack of telephone messages, among them another call from the local newspaper. She returned the call, and was questioned about the commission recommendations. "Among the issues we're addressing are expanding math achievement and increasing time-on-task," she replied. For more detail, she invited the reporter to get up the next Monday for an early morning breakfast meeting.....

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